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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,614	06/25/2003	Yukihiro Nakano	239459US0	2488
22850	7590	08/27/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER SHOSHO, CALLIE E	
			ART UNIT 1714	PAPER NUMBER
			NOTIFICATION DATE 08/27/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/602,614

Applicant(s)

NAKANO ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7,9,11,12 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5,15 and 18 is/are allowed.
- 6) ☒ Claim(s) 7,9,11,12,16 and 17 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 5/16/07.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 7, 9, 11, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rosano et al. (U.S. 2003/0045627).

The rejection is adequately set forth in paragraph 5 of the office action mailed 2/22/07 and is incorporated here by reference.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosano et al. (U.S. 2003/0045627) in view of Nakano et al. (U.S. 2002/0016385).

The rejection is adequately set forth in paragraph 7 of the office action mailed 2/22/07 and is incorporated here by reference.

Response to Arguments

6. Applicants' arguments filed 5/16/07 have been fully considered but they are not persuasive.

Specifically, applicants argue that Rosano et al. is not a relevant reference against the present claims given that while Rosano et al. disclose pigment surrounded by particles of a polymer, there is no disclosure of pigment contained in particles of polymer as presently claimed.

However, attention is drawn to paragraph 15 of Rosano et al. that disclose that each composite particle includes a pigment particle and a polymer particle and to paragraph 54 of Rosano et al. that discloses that the surface of the pigment particles are completely covered with polymer particles. Thus, given that the composite particles comprise pigment that is surrounded by polymer particles, it is clear that the pigment is contained in the polymer, i.e. polymer-containing pigment, as presently claimed. That is, given the broad disclosure of particles of pigment-containing water-insoluble polymer and given that Rosano et al. disclose particles wherein the pigment is covered by polymer, it is clear that the polymer particles contain the pigment and thus, Rosano et al. meets the requirement of the claims regarding the particle of pigment-containing water-insoluble polymer.

Applicants also argue that Rosano et al. do not disclose or suggest polymer which is a water-insoluble polymer having an ionic group at its end derived from chain transfer agent as presently claimed.

Previously, the examiner argued that although there is no explicit disclosure that the polymer of Rosano et al. has ionic group at its end, given that the polymer is prepared using thioglycolic acid identical to that presently claimed, it is clear that the polymer would inherently possess ionic group at its end. Further, although the thioglycolic acid is referred to as a reducing component and not a chain transfer agent as presently claimed, given that the polymer is prepared using thioglycolic acid as is the polymer of the present invention, it is clear that regardless of what the thioglycolic acid is called, the use of such thioglycolic acid during polymer preparation would inherently result in polymer that has ionic group at its end.

In response, applicants argue that Rosano et al. disclose that the thioglycolic acid is a reducing agent when polymerization initiators such as persulfates, peroxides, etc. are used as oxidizing agents. Given that the oxidizing agent reacts with the thioglycolic acid, applicants argue that the thioglycolic acid cannot be incorporated into the polymer end.

However, it is noted that “the arguments of counsel cannot take the place of evidence in the record”, *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). It is the examiner’s position that the arguments provided by the applicant regarding the Rosano et al. reference must be supported by a declaration or affidavit. As set forth in MPEP 716.02(g), “the reason for requiring evidence in a declaration or affidavit form is to obtain the assurances that any statements or representations made are correct, as provided by 35 U.S.C. 24 and 18 U.S.C. 1001”.

Further, it is significant to note that page 23, line 24-page 24, line 4 of the present specification discloses that the presently claimed water-insoluble vinyl polymer is obtained using

initiator including peroxides such as di-t-butyl peroxide which is identical to the oxidizing agent of Rosano et al.

Thus, given that the present invention prepares polymer having ionic group at its end utilizing initiator such as di-t-butyl peroxide and thioglycolic acid, it is not clear why the polymer of Rosano et al. which is also prepared using di-t-butyl peroxide (oxidizing agent) and thioglycolic acid (reducing agent) would not also produce polymer having ionic groups at its end. Clarification is requested.

Allowable Subject Matter

7. Claims 1-3, 5, 15, and 18 are allowable over the "closest" prior art Akers, Jr. et al. (U.S. 6,652,634) for the following reasons:

Akers, Jr. et al. disclose water-based ink comprising pigment contained in water-insoluble, i.e. prepared from monomers including hydrophobic monomers, graft copolymer dispersant wherein the graft copolymer is prepared using chain transfer agent such as 3-mercapto-1,2-propanediol. Given that the polymer is obtained using chain transfer agent such as 3-mercapto-1,2-propanediol, it is clear that the polymer would inherently have at least two hydroxyl groups at its end.

However, there is no disclosure or suggestion in Akers, Jr. et al. that the water-insoluble polymer is obtained by copolymer a monomer mixture comprising (A) salt-forming group-containing monomer, (B) macromer, and (c) monomer copolymerizable with monomer (A) and monomer (B) as now required in present claims 1-3, 5, 15, and 18.

8. Claims 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 19-20 would be allowable if rewritten in independent form as described above given that there is no disclosure in the "closest" prior art Rosano et al. (U.S. 2003/0045627) of process for preparing the water-based ink as required in present claim 19 or 20.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

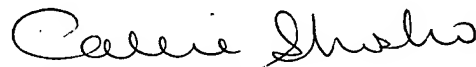
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
8/20/07